



Garay 8-32

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Patent Application**

Applicant(s): J.A. Garay et al.  
Case: 8-32  
Serial No.: 10/014,763  
Filing Date: December 11, 2001  
Group: 2132  
Examiner: Samson B. Lemma

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signature: Lisa L. Vulpis Date: February 10, 2006

Title: Methods and Apparatus for Computationally-Efficient  
Generation of Secure Digital Signatures

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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants request review of the final rejection, dated November 23, 2005, in the above-identified application. No amendments are being filed with this request. A Notice of Appeal is submitted concurrently herewith.

### REMARKS

The present application was filed on December 11, 2001 with claims 1-25. Claims 1-25 are currently pending in the application. Claims 1 and 22-25 are the independent claims.

In the Office Action, claims 2 and 3 are rejected under 35 U.S.C. §112, second paragraph as being indefinite. In addition, claims 1-7, 9, 10, 17 and 19-25 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,711,400 to Aura (hereinafter “Aura”). Finally, claims 8, 11-16 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Aura in view of U.S. Patent No. 5,016,274 to Micali et al. (hereinafter “Micali”).

In formulating the §112, second paragraph rejection, the Examiner argues that the limitation “having a computational efficiency compatible with computational resources of the user device” in claim 2, and the limitation “having a computational efficiency lower than that of the first digital signature” in claim 3 are vague and unclear (Final Office Action, #5 and #6). Applicants respectfully disagree. The scope of these limitation would be clear to one skilled in the art in light of the ordinary and customary meanings of the words and their usage in the specification. Aspects of computational efficiency and computational resources are described in the specification at, for example, p. 1, lines 12-26 and p. 7, lines 3-8.

With respect to the §102(e) rejection, Applicants initially note that the Manual of Patent Examining Procedure (MPEP), Eighth Edition, August 2001, §2131, specifies that a given claim is anticipated “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the “identical invention . . . in as complete detail as is contained in the . . . claim,” citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 1 sets forth:

A method for use in generating digital signatures in an information processing system, the system including at least a user device, an intermediary device and a verifier, the method comprising the steps of:

generating in the user device a first digital signature; and  
 sending the first digital signature to the verifier;  
 wherein the verifier sends the first digital signature to the intermediary device, and the intermediary device checks that the first digital signature is a valid digital signature for the user device and if the first digital signature is valid generates a second digital signature which is returned to the verifier as a signature generated by the user device.

In formulating the §102(e) rejection of this claim, the Examiner argues that each and every element is anticipated by Aura. More specifically, the Examiner argues that the “authentication centre” in Aura’s FIG. 4 describes the “user device” in claim 1 (Final Office Action, #10, first bullet point). What is more, the Examiner argues that the “mobile station” in Aura’s FIG. 4 describes the “intermediary device” in the claim (Final Office Action, #10, fourth and fifth bullet points). Applicants respectfully suggest that both assertions are untenable.

In Aura, an authentication centre is connected to a home location register and is a fixed element in a network (Aura, FIG. 1 and col. 1, lines 38-59). An authentication centre performs processing tasks related to authenticating the identity of the network (Aura, col. 5, lines 21-51). In contrast, the user device in claim 1, as the name clearly indicates, is a device that is operated by a user. Embodiments of the user device may comprise, for example, a mobile telephone, PDA, desktop or portable computer, or television set-top box (Specification, p. 5, lines 11-16). As a result, it is clear that Aura’s authentication centre does not describe the user device in claim 1.

Aura’s mobile station, moreover, comprises mobile equipment and a subscriber identify module (Aura, col. 1, line 66 to col. 2, line 3). A mobile station is operated by a mobile subscriber (i.e., user) (Aura, col. 1, lines 49-59). The intermediary device in claim 1, in contrast, is operative to check that a first signature generated by a user device is valid and to generate a second digital signature which is returned to the verifier as a signature generated by the user device. Again, it is clear that a Aura’s mobile station does not describe the intermediary device in claim 1.

Consequently, Aura fails to describe each and every element of claim 1. Applicants submit that claim 1 is, therefore, in condition for allowance.

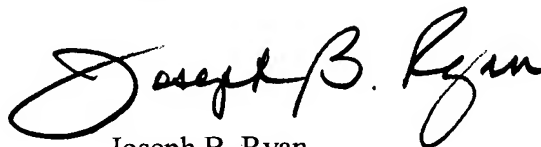
Dependent claims 2-21 are believed to be in condition for allowance for at least the same reasons as independent claim 1. Moreover, independent claims 22-25 are believed allowable for reasons similar to those identified above with regard to independent claim 1.

With respect to the §103(a) rejection of dependent claims 8, 11-16 and 18 with reference to Aura in view of Micali, Applicants respectfully submit that Micali fails to supplement the above-described fundamental deficiencies of Aura as applied to independent claim 1. Therefore, these claims would not have been obvious at the time the invention was made, and the claims are in condition for allowance.

In view of the above, Applicants respectfully request the withdrawal of the §§ 112, 102(e) and 103(a) rejections.

A Notice of Appeal is submitted concurrently with these remarks.

Respectfully submitted,

A handwritten signature in black ink, reading "Joseph B. Ryan". The signature is fluid and cursive, with the first name "Joseph" and last name "Ryan" clearly legible.

Date: February 10, 2006

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